

height of the jump, gave the following results. The first evening the leaps were made in the glass cylinder while the rest were made with the insect free.

Days	No. of Jumps	Ave. Height	Days	No. of Jumps	Ave. Height
1.....	200	11.2 cm.	6.....	20	19.0 "
2.....	75	18.3 "	7.....	30	19.0 "
3.....	61	19.0 "	8.....	50	18.8 "
4.....	50	18.7 "	9.....	15	16.6 "
5.....	51	19.3 "	10.....	Dead	0.0 "

During these ten days the insect was kept in a small container with moist earth and some bits of grass. On the ninth day the insect was almost too weak to pull the spine into place, but, though the average was slightly lower, several of the jumps were 19 centimeters high or equal to the previous attainments. When the insect was too fatigued to cock the spring it was possible to cock it with one's fingers and then allow the insect to jump. The heights under such conditions were approximately the same, 16 to 18 centimeters. When fatigue, age, and starvation have no appreciable effect upon the heights attainable by this species it would seem that the spring must be partly mechanical. That is, not only is the action muscular, but some sort of physical strain exists between the pro- and mesothorax when the spine is pulled back.

Two New *Catantacta* (Lepid.: Pieridae).

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(Plate VI.)

While examining the specimens of the genus *Catantacta* in the museums in America preparatory to a general revision of the genus, I have found several undescribed forms worthy of names. The present paper deals with two such forms. One is in the collections of the Philadelphia Academy of Natural Sciences, the other in the collections at Cornell University.

CATANTACTA FLIZA *postataurea* new subspecies.

Upper surfaces: As in *C. flize* H.-S., but with the light median band of the secondaries a rich golden yellow instead of white. In addition, in the paratype, the small white spots in the broad black-brown margin of the secondaries are obsolete.

The specimens differ from *C. noakesi* Joicey and Rosenberg in having a white median band on the primaries.

Under surfaces: as in *C. fliza*, but with the yellow internerval dashes on the disc so broadened as to make practically a continuous yellow band on the secondaries. The specimens differ from *C. noakesi* in having a white median band on the primaries and much more extended yellow markings on the secondaries.

Length of the costal margin of the forewing: Type 29 mm. Paratype 27.5 mm.

Holotype: a female from Vista Nieve, COLOMBIA. XII. 22. 1922. Coll. by H. L. Viereck. *Paratype*: possibly a male (no abdomen on specimen) from Hacienda Cincinnati, Sierra San Lorenzo, Magdalena, Colombia, 4200 feet, VII. 21. 1920. The types are in the collections of the Philadelphia Academy of Natural Sciences, Philadelphia, Pennsylvania.

Catasticta forbesia new species.

Probably allied to *C. straminae*.

Upper surfaces: resembling to some degree *C. pitana*. The specimen differs on this surface from *C. pitana* in the following respects: The primaries lack the submarginal row of white dots and the subapical dots are reduced in size; the black-brown marginal band of the secondaries contains a series of large white spots, some of which run into the white discal area; the internerval spaces on the margin contain more or less triangular white spots. On the whole, the upper surfaces present the appearance of a slightly aberrant specimen of *pitana*, with the inner margins of the dark marginal band rather irregular.

Under surfaces: It is on these surfaces that the alliance with *straminae* is discernible, the two being identical in shape and position of the maculation. They differ in the base color; it is white in *forbesia* and buff in *straminae*.

Length of the costal margin of the primary: Type 19.2 mm. For a series of *straminae* the average is 20.4 mm. and for a long series of *pitana* it is 27.6 mm.

Holotype: a male from Tambo Eneñas, Camino del Pichis, PERU, VII. 4. 1920. Cornell University Expedition, Lot No. 607, Sub 125. The type is in the collections of the Department of Entomology, Cornell University, Ithaca, New York. The species is named in honor of Dr. William T. Forbes of that institution.